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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/024,598	12/21/2001	Kazutaka Okamoto	381AS/50814	2510

7590 10/21/2003  
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EXAMINER

LEO, LEONARD R

ART UNIT	PAPER NUMBER
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3753

DATE MAILED: 10/21/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/024,598

Applicant(s)

OKAMOTO ET AL.

Examiner

Leonard R. Leo

Art Unit

3753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 April 2003.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-30 is/are pending in the application.
- 4a) Of the above claim(s) 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

**DETAILED ACTION**

***Election/Restrictions***

The amendment filed April 17, 2003 has been entered. Claims 1-25 are cancelled, and claims 26-30 are pending. In the response filed July 29, 2003, claims 26-29 read on the elected species and sub-species, and claim 30 is withdrawn.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 26 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peck.

Peck (Figures 11-14) discloses all the claimed limitations except a weld bead.

The Examiner takes Official Notice of the equivalence of welding, brazing and soldering for their use in the metal diffusion bonding art and the selection of any of these known equivalents to bond components together would be within the level of ordinary skill in the art.

Regarding claims 26 and 28-29, Figure 14 discloses groove 82 in cooling plate 73 covered by lid 81 in a second groove 80. The periphery of the second groove 80 and the lid 81 is "beyond the periphery of groove 82."

Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peck in view of Kimura et al.

The device of Peck lacks a plurality of independent passages.

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Kimura et al discloses a cooling plate comprising a base 10 having a plurality of independent heat pipe passages 1 for the purpose of improving heat exchange.

Since Peck and Kimura et al are both from the same field of endeavor and/or analogous art, the purpose disclosed by Kimura et al would have been recognized in the pertinent art of Peck.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Peck a plurality of independent passages for the purpose of improving heat exchange as recognized by Kimura et al. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *In re Harza*, 274F.2d 669, 124 USPQ 378 (CCPA 1960).

#### ***Response to Arguments***

Regarding applicants' remarks with respect to Peck, the previous and instant rejections purport that the prior art structure as disclosed by Peck made with known prior art bonding techniques does not merit patentability. In the Official Notice, the Examiner believes that any known prior art bonding technique may be employed to achieve any known results. The Examiner recognizes there are differences in different bonding techniques, where one of ordinary skill in the art would select a suitable method depending on design and cost requirements. Applicants do not state novelty in friction welding alone, rather the combination of the known prior art method of friction welding to manufacture the known prior art structure of Peck is alleged to be novel. The Examiner does not agree.

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The rejection in view of the secondary reference of Kimura et al is deemed correct for teaching one of ordinary skill in the art a plurality of independent passages for the purpose of improving heat exchange, since applicants did not traverse this teaching.

Lastly, the Examiner appreciates the Japanese document 7-505090 submitted in the IDS. However, it is unclear how the prosecution is advanced without a readily available English version, which is now submitted by the Examiner.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry of a general nature, relating to the status of this application or clerical nature (i.e. missing or incomplete references, missing or incomplete Office actions or forms) should be directed to the Technology Center 3700 Customer Service whose telephone number is (703) 306-5648. Status of the application may also be obtained from the Internet: <http://pair.uspto.gov/cgi-bin/final/home.pl>

Any inquiry concerning this Office action should be directed to Leonard R. Leo whose telephone number is (703) 308-2611.



LEONARD R. LEO  
PRIMARY EXAMINER  
ART UNIT 3753

October 9, 2003